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(54) Title: CONTRAST–ENHANCED DIAGNOSTIC IMAGING METHOD FOR MONITORING INTERVENTIONAL THERAPIES

(57) Abstract

The present invention relates to a contrast–enhanced diagnostic imaging method for monitoring the efficacy of interventional therapies. The contrast agents useful in this method comprise an image–enhancing moiety (IEM) and a state–dependent tissue binding moiety (SDTBM). These contrast agents exhibit state–dependent binding to one or more components of a targeted tissue or tissue component and provide a detectable change in the signal characteristics of the agent once bound to the targeted tissue. As a result, these agents exhibit a binding affinity for, and thus image contrast of, the targeted tissue which changes as the tissue–state changes during therapy.

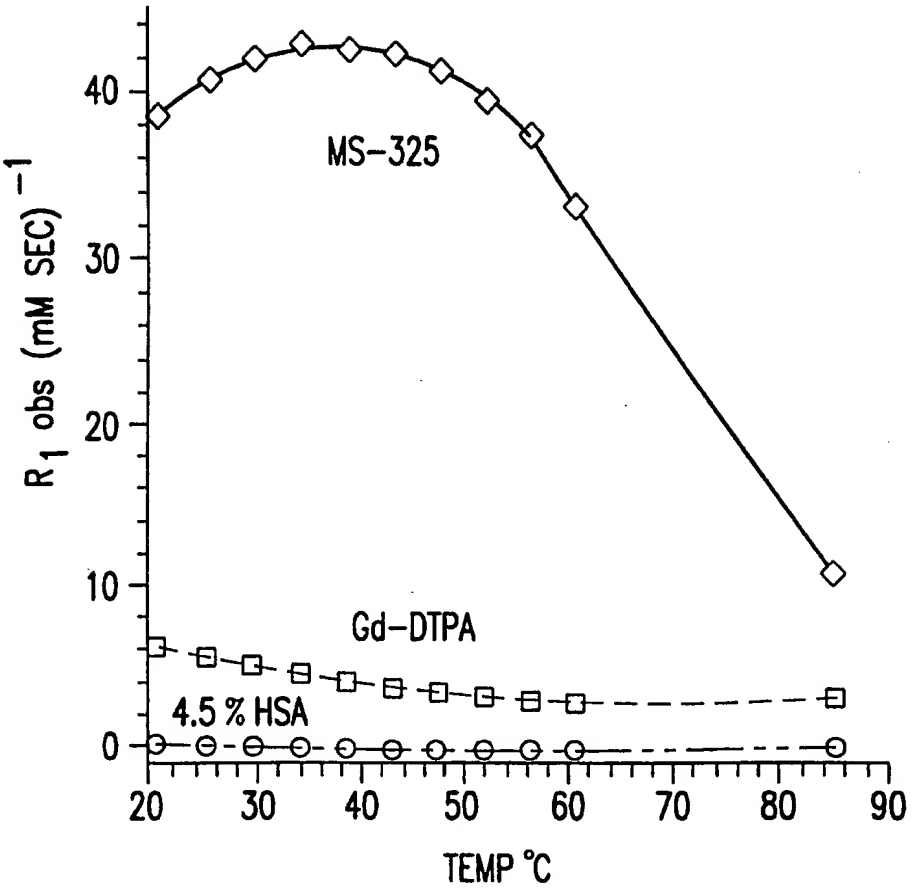
40
30
20
10
0
R_1 obs (mM SEC)$^{-1}$
MS-325
Gd-DTPA
4.5 % HSA
20
30
40
50
60
70
80
90
TEMP °C

FIG.1

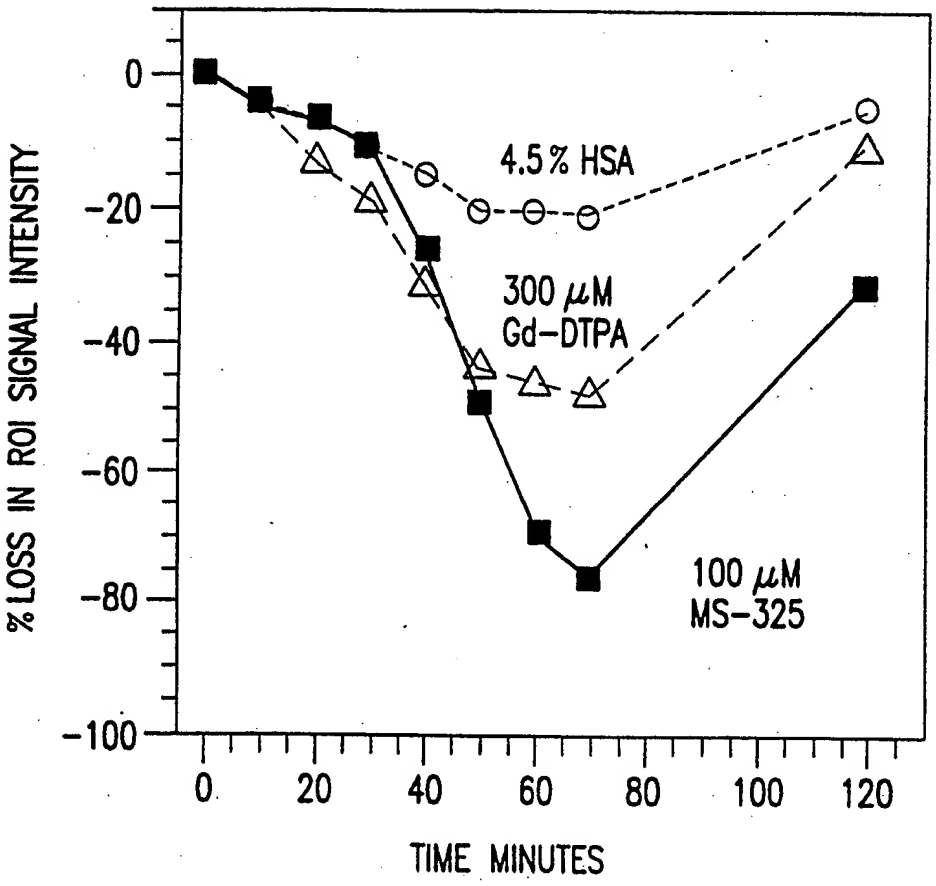

FIG.2

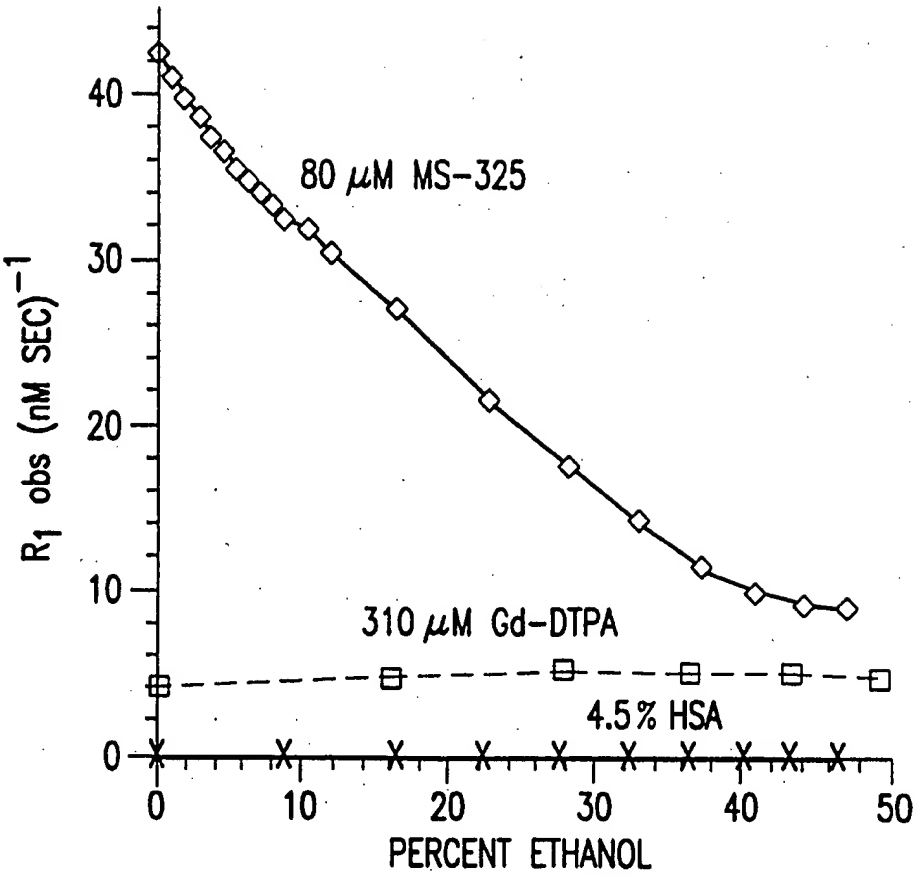

FIG.3